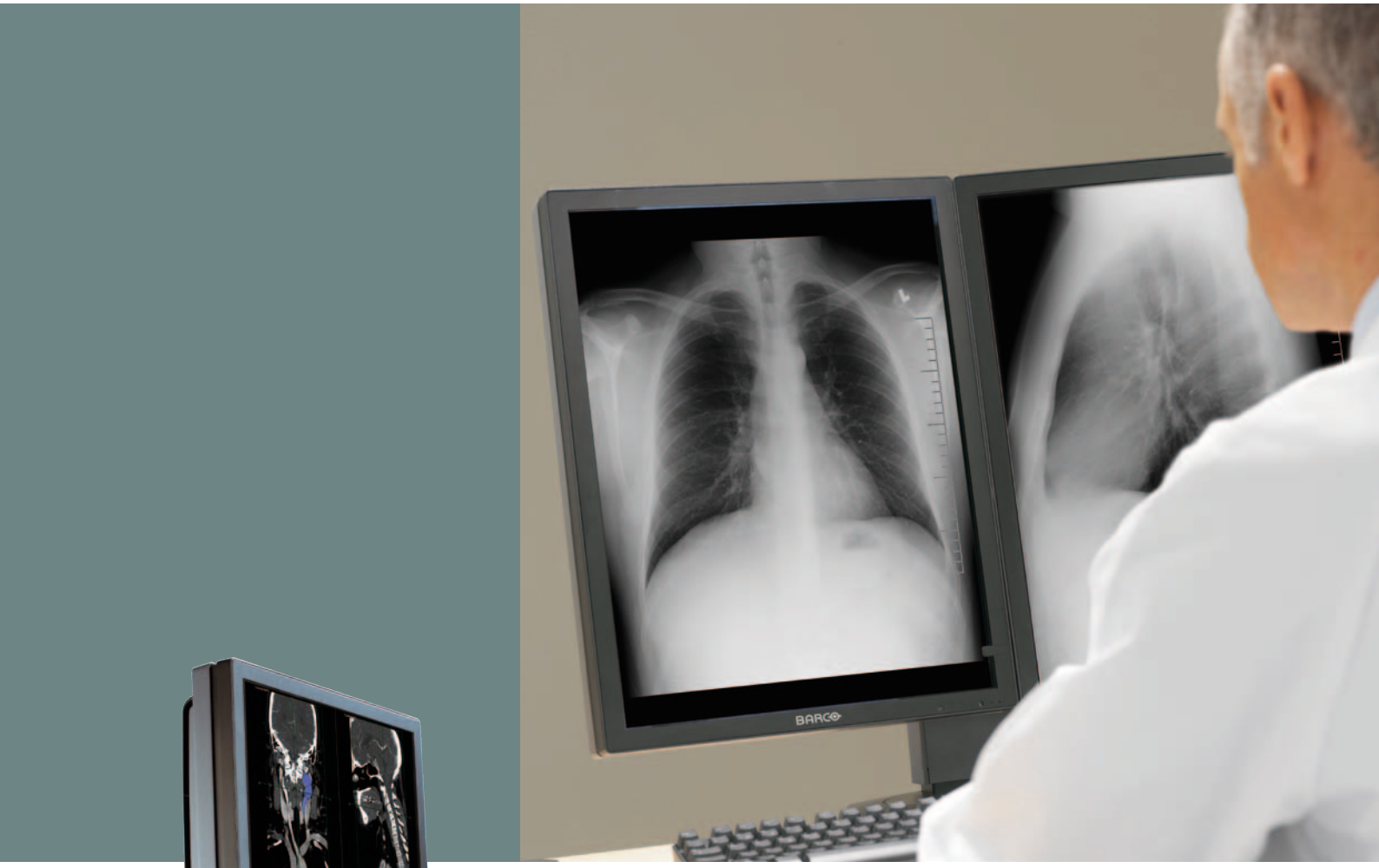
Coronis

Premium diagnostic display system



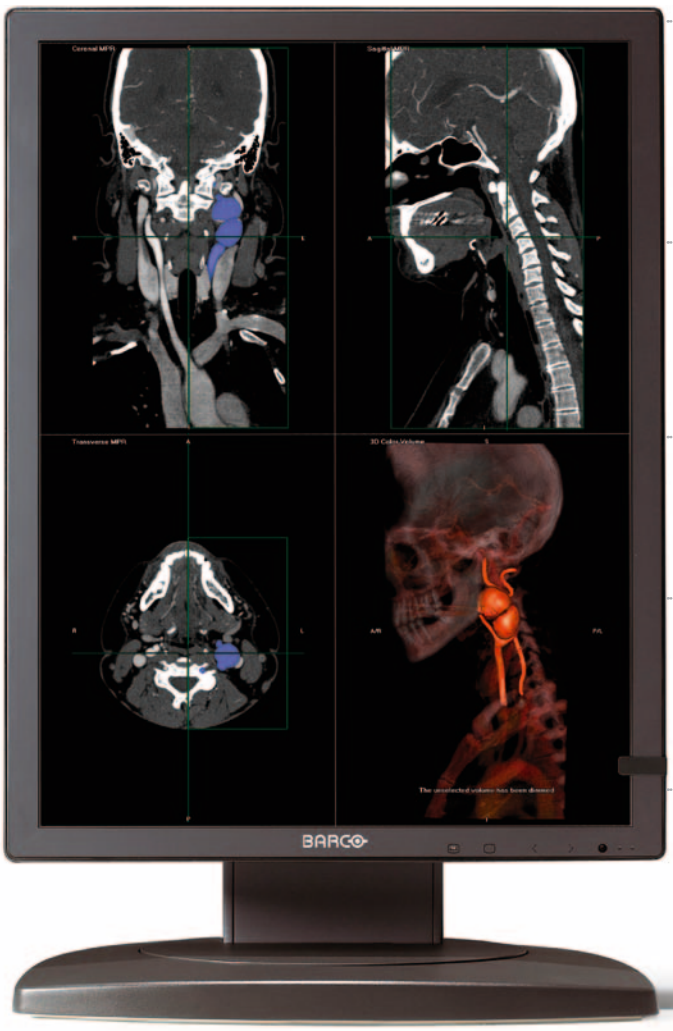
BARCO

Visibly yours

Put your trust in proven performance

Twenty years of experience and innovation in diagnostic imaging have culminated in the unrivaled Coronis display system. Combining proven technology with cutting edge enhancements, Coronis PACS displays help radiologists diagnose with ultimate precision and confidence. In 2D and 3D. In grayscale and color.

When precision is a must, put your trust in the proven performance of Coronis.



PRECISION
Read images with unsurpassed contrast, brightness and uniformity thanks to the state-of-the-art LCD panel with Uniform Luminance Technology.

CONFIDENCE
Be assured of continuous DICOM-quality with the MediCal QAWeb QA system and integrated I-Guard sensor.

PRODUCTIVITY
Diagnose more efficiently in 2D and 3D thanks to the high-speed display controller.

EASE-OF-USE
Read your studies more comfortably and counteract eye-fatigue with the non-reflective screen surface.

DURABILITY
Get maximum value from your investment thanks to proven quality, dedicated support services and a 5-year warranty.

Unsurpassed precision

Grayscale technology perfected

Building on proven technology, Coronis grayscale displays provide ultimate precision and performance while maintaining a reputation for the highest brightness and contrast. The advanced 10-bit architecture ensures accurate image representations with 1024 simultaneous shades of gray out of a palette of 4096.

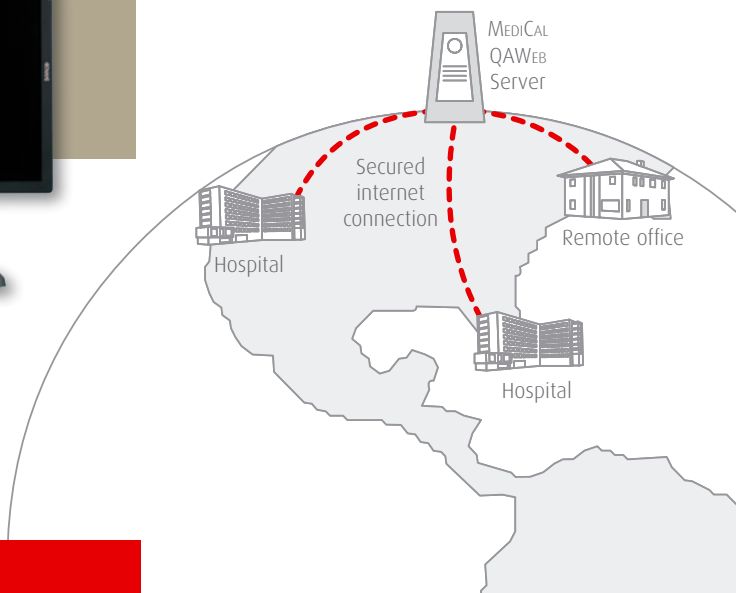
Unmatched color accuracy

Color-augmented modalities are quickly being adopted in the day-to-day radiology practice. With the dedicated Coronis Color 2MP display system, Barco brings diagnostic confidence and dependable performance to the visualization of these color-enhanced modalities.

The versatile Coronis Color 2MP is a multi-modality display system that complies with the industry's most stringent medical approvals. It presents radiologists with an effective visualization solution for a broad range of color applications, including 3D PACS, 3D echo, color ultrasound, orthopedic imaging, CAD, cardiac imaging, nuclear medicine, PET-CT fusion, etc.

Transparent calibration and Quality Assurance

Coronis benefits from an innovative softcopy QA system that brings a new degree of transparency to your QA routine. Together with the intelligent I-Guard sensor, MediCal QAWeb provides an easy-to-use tool for calibration and QA, ensuring continuous diagnostic quality and maximum uptime of your workstation. Running in the background, MediCal QAWeb allows you to continue diagnoses while automated QA checks are being executed. The system also includes a secure online web service for remote, centralized image quality management. Comprehensive asset management tools provide a complete overview of the workstations connected to MediCal QAWeb. In the occurrence of a performance problem, the right people will be notified.



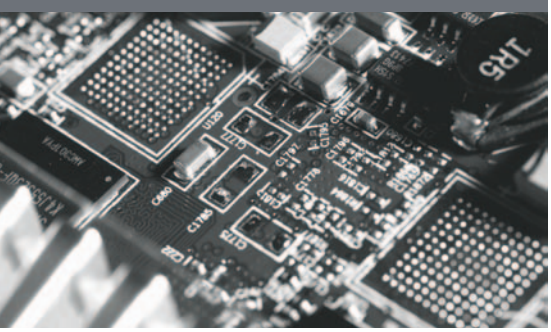
Unprecedented performance

Impressive performance in 2D and 3D

10 BIT

As image data sets become larger with every new generation of acquisition devices, patient throughput becomes an ever increasing concern. In line with this evolution, Barco combines the Coronis displays with a high-performance, 10-bit graphics processing unit based on the PCI Express interface. The powerful display controller is your guarantee for ultra-fast and smooth image loading, roaming and manipulation in 2D and 3D.

With medical software applications increasingly relying on OpenGL or Microsoft DirectX, Barco also provides specific support for 3D enabled medical software applications. This results in dedicated driver solutions that make medical applications run faster and more efficiently.



High-performance display controller for maximum speed and precision

Worry-free DICOM compliance under all lighting conditions

I-GUARD ALC

The integrated I-Guard continually guards and adjusts the luminance output of the diagnostic viewing area. Combined with the MediCal QAWeb software, the patented I-Guard brings fast and easy calibrations, automatic Quality Assurance testing and remote diagnoses of the display. The latest version of I-Guard has been further improved with increased read-out speed and enhanced sensitivity down to the lowest luminance levels.

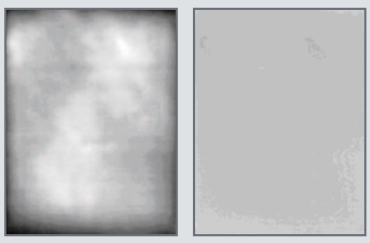
The intelligent Ambient Light Compensation (ALC) system assures that Coronis systems remain DICOM compliant under all lighting conditions by adapting their brightness relative to the ambient light conditions. If the level of ambient light no longer corresponds to the predefined range, users will automatically be notified.

Continuous diagnostic confidence thanks to I-Guard technology

Uniform image rendering across the entire screen

ULT

While traditional LCD display systems typically suffer from luminance non-uniformities up to 30%, Coronis displays deliver perfectly balanced luminance over the entire screen. Based on an individual characterization of the image down to pixel level, the proprietary Uniform Luminance Technology (ULT) corrects non-uniformities caused by the LCD as well as the backlight. Thanks to this technology, diagnostic images conform to DICOM not just in the center but everywhere on the screen.



Without ULT *With ULT*

Uniform brightness across the screen with Uniform Luminance Technology (ULT)

Unequaled reading comfort

Fully integrated multi-head configurations

Featuring an integrated pedestal concept, Coronis enables customized multi-head configurations. Color and grayscale, portrait and landscape, 2D and 3D can be combined as specified by the user. Thanks to the 'virtual' hinge system, the individual heads will move and track as one integrated system when they are being adjusted. The very thin bezel design ensures enhanced reading comfort in a multi-head setup.

Elegant mounting of a third monitor for RIS, HIS,...

User-definable reading comfort

From the start, Coronis has been designed for convenience. The system is easy to set up and the handy, solid pedestal makes precise, user-specific adjustments, such as lifting, tilting and swiveling very easy to perform. All cables can be neatly tucked away thanks to an integrated cable management system.

Reduced eye fatigue

To counteract eye fatigue, the screen has been treated with a special, non-reflective coating. A protective front cover will also protect the valuable LCD against damage from intensive use in clinical rooms. Moreover, the new Coronis display system can be fitted with an optional keyboard illumination device. Installed underneath the display, the dimmable LED light avoids reflections due to ambient light and creates the ideal lighting conditions for every individual workstation.

5-year warranty

Built to deliver maximum peace of mind, Coronis display systems come with a 5-year warranty. In addition, Barco offers an array of dedicated support services to help you reduce unscheduled downtime and keep your expenses under control. Barco's global organization is your guarantee for professional support, wherever you are, whenever you need it.

Integrated multi-head design

Protective non-reflective glass cover

LED keyboard illumination

Coronis options

Integrated pedestal for dual-head display system

Integrated pedestal for triple-head display system

LED keyboard illumination

MediCal QAWeb service: Premium level

A family of diagnostic precision

MDCG-2121	MDCG-3120	MDCC-2121
2 MP	3 MP	2 MP
GRAY	GRAY	COLOR
10 BIT	10 BIT	30 BIT
I-GUARD	I-GUARD	I-GUARD
ALC	ALC	ALC
ULT	ULT	ULT
GLASS	GLASS	GLASS
QAWeb	QAWeb	QAWeb
5Y WARRANTY	5Y WARRANTY	5Y WARRANTY

Coronis online

Visit the dedicated **Coronis microsite** at
www.barcomedical.com/coronis

Configure your own Coronis system at
www.barcomedical.com/coronis > **configure**

For more detailed technical specifications, please check the dedicated sheet or visit www.barcomedical.com.

Technical specifications Coronis

Display	Coronis 2MP	Coronis 3MP	Coronis Color 2MP
Display product code	MDCG-2121	MDCG-3120	MDCC-2121
Display technology	SA-SFT AM LCD IPS	TFT AM LCD Dual Domain IPS	TFT AM LCD Dual Domain IPS-Pro
Active screen diagonal	540 mm (21.3")	528 mm (20.8")	540 mm (21.3")
Active screen width	432 mm (17.0")	424 mm (16.7")	432 mm (17.0")
Active screen height	324 mm (12.8")	318 mm (12.5")	324 mm (12.8")
Pixel pitch	0.270 mm (0.01063")	0.207 mm (0.00815")	0.270 mm (0.01063")
Resolution	1600 x 1200 / 1200 x 1600	2048 x 1536 / 1536 x 2048	1600 x 1200 / 1200 x 1600
Maximum luminance	900 cd/m² (262.68 fL) (typ)	1000 cd/m² (291.87 fL) (typ)	700 cd/m² (204.30 fL) (typ)
DICOM calibrated luminance	500 cd/m² (145.93 fL)	500 cd/m² (145.93 fL)	300 cd/m² (87.56 fL) *(Native white, ULT off)*
Contrast ratio (dark reading room)	700:1 (Typ.)	900:1 (Typ.)	1100:1 (Typ.)
Viewing angle	170°	170°	170°
Display LUT	12 bit	12 bit	30 bit color
Video input	DVI	DVI	DVI
Image stabilization	embedded I-Guard	embedded I-Guard	embedded I-Guard
Uniform Luminance Technology	Yes	Yes	Yes
Ambient Light Compensation (ALC)	Yes	Yes	Yes
Display dimensions portrait (WxHxD) (*)	369 x 559 x 285 mm 14.53" x 22.01" x 11.22"	369 x 559 x 285 mm 14.53" x 22.01" x 11.22"	381 x 565 x 285 mm 15" x 22.24" x 11.22"
Display dimensions landscape (WxHxD)(*)	477 x 504 x 285 mm 18.78" x 19.84" x 11.22"	477 x 504 x 285 mm 18.78" x 19.84" x 11.22"	489 x 510 x 285 mm 19.25" x 20.08" x 11.22"
Display weight	16,5 kg (36.4 lb)	16,5 kg (36.4 lb)	16,5 kg (36.4 lb)
Approvals	EN60601-1-2	EN60601-1-2	EN60601-1-2
	FCC-B	FCC-B	FCC-B
	CE,CCC, ICES-001, KETI, PSE	CE,CCC, ICES-001, KETI, PSE	CE,CCC, ICES-001, KETI, PSE
Operational temperature range	0°C to + 40°C (32°F to 98°F)	0°C to + 40°C (32°F to 98°F)	0°C to + 40°C (32°F to 98°F)
Within spec temperature range	+15°C to +35°C (59°F to 95°F)	+15°C to +35°C (59°F to 95°F)	+15°C to +35°C (59°F to 95°F)
Power consumption	74 W (typ)	85 W (typ)	100 W (typ)

(*) Pedestal in max position

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Display controllers	BarcoMed Coronis® PCI	BarcoMed Coronis® PCIe	MXRT-5200
SYSTEM REQUIREMENTS			
Bus compatibility	PCI 2.2 universal signaling	PCI Express® x8, x16	PCI Express® x16 native support
Power consumption	< 15 W	< 15 W	Computer power supply of 375 W or higher recommended (assumes a fully loaded system)
Form factor	106 x 176 x 16 mm (4.2" x 6.9" x 0.6")	106 x 176 x 16 mm (4.2" x 6.9" x 0.6")	98,4 x 228,6 x 15,9 mm (3.87" x 9.0" x 0.63")
Operating system	Windows® 2000, XP, X64, Vista XPDM	Windows® 2000, XP, X64, Vista XPDM	Windows XP 32/64-bit, Server 2003, 2008, Vista XPDM, WDDM
Platforms	Intel® architectures	Intel® architectures	Intel® and AMD™ architectures
CHARACTERISTICS			
Graphics accelerator	Barco Aura	Barco Aura	ATI FireGL™
Display memory	128 MB	128 MB	512 MB GDDR4
Look-Up Table	10 bits in/ 10 bits out	10 bits in/ 10 bits out	24 bits in / 24 bits out
Pixel depth	10 bit	10 bit	24 bit / 30 bit (HDR mode)
Electrical standard	Single Link DVI complying to v1.0 specification	Single Link DVI complying to v1.0 specification	Dual Link DVI complying to v1.0 specification
Direct 3D HW support	na	na	Microsoft DirectX v10.0/v9.0, Vertex Shader v4.0/v3.0, Pixel Shader v4.0/v3.0
OpenGL® HW support	na	na	OpenGL® 2.1
VIDEO OUTPUT			
Connectors	Two DVI-D connectors	Two DVI-D connectors	Two DVI-I connectors
Supported resolutions	Up to 2560x2048	Up to 2560x2048	Up to 3280x2048
	VGA at boot-up	VGA at boot-up	VGA at boot-up
APPROVALS			
Approvals and compliance	FCC-B, CE, EN55022 A, EN 50082-1	FCC-B, CE, EN55022 B, EN 61000-6, IEC 60601-102	FCC part 15 Class B, CE, UL-60950-1, BMSI CNS, CISPR-22/24, VCCI, CSA C22.2, EU RoHS, MIC
ENVIRONMENTAL			
Operational temperature	10° to 60°C (50° to 140°F)	10° to 60°C (50° to 140°F)	0° to 55°C (32° to 131°F)

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Barco medical imaging systems

Barco, a global market leader in visualization solutions for Picture Archiving and Communication Systems, has been developing visionary medical imaging solutions for almost twenty years. Driven by experience and innovation, Barco presents a full range of state-of-the-art solutions for radiological, surgical and clinical imaging. From acquisition to display, from image processing to quality assurance, Barco's hardware and software solutions deliver the perfection patients deserve.

Barco's commitment to quality has earned the trust of customers from all over the world, who partner with Barco to meet their most demanding imaging challenges. This partnership approach is also reflected in Barco's worldwide customer service network, ensuring professional support, wherever you are, whenever you need it.

Request more information

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Sigma

In search of continuous improvement

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